

REMARKS/ARGUMENTS

Claims 1-4, 9, 11, 13, 22, 24-26, and 30-39 are currently pending.

The courteous telephone interview granted applicants' undersigned attorney on September 23 by Examiner Douglas Blair is hereby respectfully acknowledged. The Examiner provided clarification regarding the Notice of Non-Responsive Amendment. In the Notice the Examiner states that the Applicant "does not identify which limitations in the respective claims are patentable over the prior art". The specific limitations in the claims that are referred to in each argument are shown below in italics.

Claims 1-4, 9, 11, 13, 22, and 24-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,260,062 (Davis et al.) in view of U.S. Patent Application Publication No. 2002/0161883 (Matheny et al.).

Davis et al. disclose an element management system for heterogeneous telecommunications network. The management system provides a core set of element independent network management messages that support basic network management functions. Element-independent messages to an individual network element are mapped to an element-dependent message for that network element.

Davis et al. do not show or suggest: a) providing a network element independent module that includes functions for managing different types of network elements; and b) one or more network element dependent modules that include functions for managing a specific type of network element, as set forth in claim 1. In contrast to applicants' invention, Davis et al. provide adapter blocks that translate element-independent messages into element-dependent messages. Thus, all functions (instructions) are translated into a message and protocol associated with a specific network element. Davis et al. do not provide two different modules (a network element independent module, a network element dependent module) that provide different functions; one that includes functions for managing different types of network elements and another that

includes functions for managing a specific type of network element, as set forth in the claims.

Furthermore, *Davis et al. do not show or suggest a network management application that calls the functions of the network element independent and dependent modules to manage different network elements, as set forth in claim 1.* Rather than calling functions of specific modules to manage different network elements, as required by claim 1, Davis et al. provide a message converter which just converts messages that are exchanged between a management station and a network element.

Moreover, *Davis et al. do not show or suggest receiving a message indicating that there is a new network element in the network, sending a request to the new network element, or initializing a network element independent module for the new network element, as set forth in claim 1.* With regard to these limitations, the Examiner refers to col. 13, line 53 - col. 14, line 29 of Davis et al. This section of the patent describes how multiple units of the same type and manufacture of a network element may be served by a single adapter block. An example is provided with regard to forming a circuit connection to a network element 231, which is already in communication with the management station 202 via adapter block 221. Request Broker 211 transmits a message that instructs multiplexer 231 to establish a connection to form a circuit. An element-independent message is transmitted to adapter block 221 which currently serves network element 231. Adapter block 221 translates the element independent message into an element dependent message, which is transmitted to the network element. Since the network element is already in communication with the management station, there is no message indicating that there is a new network element in the network, message sending a request to a new network element, and no need to initialize the network element.

Furthermore, since Davis et al. do not receive information about a new network element, *they do not determine if a new network element corresponds to a network element dependent module accessible by the network management application or utilize the network element dependent module to manage a new network element.*

As noted by the Examiner, Davis et al. do not receive or store a new network element dependent module if a new network element does not correspond to one of the network element dependent modules accessible by a network management application.

The Matheny et al. patent application is directed to a system for collecting network discovery data. Discovery agents 106 use XML to communicate with a discovery manager. Agents are registered during installation or during an upgrade. The discovery agents collect information from targeted network devices during a discovery operation which is initiated by a network manager 104. The network manager collects the discovered information. *Matheny et al. do not receive or store a new network element dependent module if a new network element does not correspond to a network element dependent module accessible by a network management application.* In contrast to the claimed invention, the discovery agent of Matheny et al. collects data when a discovery operation is initiated by the network manager. The discovery agent does not determine if a new network element corresponds to an existing network element dependent module, as required by claim 1. The Examiner cites paragraph [0026], which merely discloses how a network manager creates a key for each discovered device. The key is generated at the network manager, rather than being received and stored at the node.

Applicants' invention is particularly advantageous in that it allows for new features and new network elements to be readily managed by a network management application. The network element dependent module can provide specifications and functions that are specific to the network element to which the network element dependent module is associated. The network management application can utilize network element independent modules for functions that are generic to the network element type, and network element dependent modules for functions that are specific to the network element type. In this manner, a new network element can be added to a network and readily managed by the network management application regardless of whether the network element includes new features or is a new network element.

Conventional techniques, such as those disclosed in Davis et al., require a network management application to be updated in order for the application to manage the new features of a network element.

Accordingly, claim 1 is submitted as patentable over Davis et al. and Matheny et al.

Claims 2-4, 22, 24-26, and 36-39, depending either directly or indirectly from claim 1, are submitted as patentable for at least the same reasons as their base independent claims.

Claim 4 is further submitted as patentable over *Davis et al. which do not show or suggest a dependent module including a graphical representation of the network element*. In rejecting the claim, the Examiner refers to col. 16, lines 44-55. This section of the patent describes how an event manager correlates events received from user interface applications.

Claim 9 is directed to a method of managing network elements in an optical network at a node in the network and is submitted as patentable for at least the reasons set forth above with respect to claim 1. *As previously discussed, neither Davis et al. nor Matheny et al. teach receiving a message indicating that there is a new network element in the network and sending a request to the new network element for information about the network element*. Davis et al. deal with nodes already in communication a management station. Matheny et al. collect data when a discovery operation is initiated by a network manager and do not receive or transmit individual messages between two nodes based on a message indicating a new network element is present in the network.

Furthermore, *the cited references do not show or suggest determining if a new network element is compatible with a specific type of another network element on the network*. Davis et al. note that multiple units of the same type and manufacture of a network element may be served by a single adapter block. However, Davis et al. do not receive information about a new network element and use that information to determine

whether or not a new network element is compatible with a specific type of another network element on the network.

Moreover, as previously discussed *neither Davis et al. nor Matheny et al. teach sending a request to a new network element for a network element dependent module that includes functions for managing the specific type of network element or executing a received network element dependent module to create an interface to the network element.* Davis et al. use existing adapter blocks to server network elements. Matheny et al. use a discovery manager to read through registration files at an agent.

Accordingly, claim 9, and claims and claims 11 and 13, depending therefrom, are submitted as patentable over the cited references.

With regard to claim 13, *Matheny et al. do not teach receiving an object change message that there is a new network element on the network.* Paragraphs [0016]-[0018] of Matheny et al. simply describe how an agent registers with a discovery manager by placing a file in an agent directory in the discovery database (see, Fig. 2). There is no suggestion of receiving an object change message that indicates that there is a new network element on the network.

New claim 30 is submitted as patentable for at least the reasons set forth above with regard to claims 1, 9 and 13. Claim 30 is further submitted as patentable over the cited references which do not show or suggest storing information on network elements including path information for communicating with the network elements.

Claims 31-35, depending either directly or indirectly from claim 30, are submitted as patentable for at least the same reasons as claim 30.

For the foregoing reasons, Applicants believe that all of the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 399-5608.

Appl. No. 10/060,926
Response Dated October 3, 2008
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Respectfully submitted,

A handwritten signature in black ink, appearing to read 'C. Kaplan', with a long horizontal flourish extending to the right.

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